

His Val Lys Ser Ala Ala Glu Arg Asn Lys His Val Asn Val Phe Leu  
65 70 75 80

Lys His Pro His Ser Ala Lys Ile Pro Phe Ile Ile Gly Ile Ala Gly  
85 90 95

Ser Val Ala Val Gly Lys Ser Thr Thr Ala Arg Ile Leu Gln Lys Leu  
100 105 110

Leu Ser Arg Leu Pro Asp Arg Pro Lys Val Ser Leu Ile Thr Thr Asp  
115 120 125

Gly Phe Leu Phe Pro Thr Ala Glu Leu Lys Lys Lys Asn Met Met Ser  
130 135 140

Arg Lys Gly Phe Pro Glu Ser Tyr Asp Val Lys Ala Leu Leu Glu Phe  
145 150 155 160

Leu Asn Asp Leu Lys Ser Gly Lys Asp Ser Val Lys Ala Pro Val Tyr  
165 170 175

Ser His Leu Thr Tyr Asp Arg Glu Glu Gly Val Phe Glu Val Val Glu  
180 185 190

Gln Ala Asp Ile Val Ile Ile Glu Gly Ile Asn Val Leu Gln Ser Pro  
195 200 205

Thr Leu Glu Asp Asp Arg Glu Asn Pro Arg Ile Phe Val Ser Asp Phe  
210 215 220

Phe Asp Phe Ser Ile Tyr Val Asp Ala Glu Glu Ser Arg Ile Phe Thr  
225 230 235 240

Trp Tyr Leu Glu Arg Phe Arg Leu Leu Arg Glu Thr Ala Phe Gln Asn  
245 250 255

Pro Asp Ser Tyr Phe His Lys Phe Lys Asp Leu Ser Asp Gln Glu Ala  
260 265 270

Asp Glu Met Ala Ala Ser Ile Trp Glu Ser Val Asn Arg Pro Asn Leu  
275 280 285

Tyr Glu Asn Ile Leu Pro Thr Lys Phe Arg Ser Asp Leu Ile Leu Arg  
290 295 300

Lys Gly Asp Gly His Lys Val Glu Glu Val Leu Val Arg Arg Val  
305 310 315

<210> 4

 $\langle 211 \rangle$  312

<212> PRT

<213> Mycobacterium leprae

<400> 4

Met Pro Arg Leu Ser Glu Pro Ser Pro Tyr Val Glu Phe Asp Arg Lys  
1 5 10 15

Gln Trp Arg Ala Leu Arg Met Ser Thr Pro Leu Ala Leu Thr Glu Glu  
20 25 30

```
<210> 5
<211> 312
<212> PRT
<213> Mycobacterium tuberculosis
<400> 5
```

Met Ser Arg Leu Ser Glu Pro Ser Pro Tyr Val Glu Phe Asp Arg Arg  
 1 5 10 15  
 Gln Trp Arg Ala Leu Arg Met Ser Thr Pro Leu Ala Leu Thr Glu Glu  
 20 25 30  
 Glu Leu Val Gly Leu Arg Gly Leu Gly Glu Gln Ile Asp Leu Leu Glu  
 35 40 45  
 Val Glu Glu Val Tyr Leu Pro Leu Ala Arg Leu Ile His Leu Gln Val  
 50 55 60  
 Ala Ala Arg Gln Arg Leu Phe Ala Ala Thr Ala Glu Phe Leu Gly Glu  
 65 70 75 80  
 Pro Gln Gln Asn Pro Asp Arg Pro Val Pro Phe Ile Ile Gly Val Ala  
 85 90 95  
 Gly Ser Val Ala Val Gly Lys Ser Thr Thr Ala Arg Val Leu Gln Ala  
 100 105 110  
 Leu Leu Ala Arg Trp Asp His His Pro Arg Val Asp Leu Val Thr Thr  
 115 120 125  
 Asp Gly Phe Leu Tyr Pro Asn Ala Glu Leu Gln Arg Arg Asn Leu Met  
 130 135 140  
 His Arg Lys Gly Phe Pro Glu Ser Tyr Asn Arg Arg Ala Leu Met Arg  
 145 150 155 160  
 Phe Val Thr Ser Val Lys Ser Gly Ser Asp Tyr Ala Cys Ala Pro Val  
 165 170 175  
 Tyr Ser His Leu His Tyr Asp Ile Ile Pro Gly Ala Glu Gln Val Val  
 180 185 190  
 Arg His Pro Asp Ile Leu Ile Leu Glu Gly Leu Asn Val Leu Gln Thr  
 195 200 205  
 Gly Pro Thr Leu Met Val Ser Asp Leu Phe Asp Phe Ser Leu Tyr Val  
 210 215 220  
 Asp Ala Arg Ile Glu Asp Ile Glu Gln Trp Tyr Val Ser Arg Phe Leu  
 225 230 235 240  
 Ala Met Arg Thr Thr Ala Phe Ala Asp Pro Glu Ser His Phe His His  
 245 250 255  
 Tyr Ala Ala Phe Ser Asp Ser Gln Ala Val Val Ala Ala Arg Glu Ile  
 260 265 270  
 Trp Arg Thr Ile Asn Arg Pro Asn Leu Val Glu Asn Ile Leu Pro Thr  
 275 280 285  
 Arg Pro Arg Ala Thr Leu Val Leu Arg Lys Asp Ala Asp His Ser Ile  
 290 295 300  
 Asn Arg Leu Arg Leu Arg Lys Leu  
 305 310

09567EE9 0300001  
 T000000 53549960